



Anthony D. Cortese, Sc.D.  
Commissioner

GOVERNMENT DOCUMENTS  
COLLECTION

APR 21 1983

# Hazardous Waste Update

FEBRUARY-MARCH, 1980 • FEBRUARY-MARCH, 1980 • FEBRUARY-MARCH, 1980 • FEBRUARY-MARCH, 1980 •

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Few people outside of government realize how much work must be done to implement a law after it has been passed by the legislature. In order to satisfy the requirements of the Massachusetts Hazardous Waste Management Act, new regulations must be written and enforced, criteria must be established and permits must be issued, a manifest system must be created so that wastes can be tracked, abandoned hazardous waste sites must be identified, and the public must be consulted and involved in DEQE's decision-making. The Massachusetts Hazardous Waste Act created a Division of Hazardous Waste (DHW) within DEQE to assume responsibility for these activities, but the Act provided no funds for the new Division. Recognizing the importance of its charge, the DHW has devoted considerable effort in its early months to program planning activities, that is, planning how best to implement the Hazardous Waste Management Act. The lead article in this issue of the Update will explain the planning process and its findings, and will examine the difficult choices the Division faces in setting its priorities.

## HOW PROGRAM PLANNING WORKS

Program planning is a management tool designed to help an organization use its resources as efficiently as possible. It does this by forcing the agency to spell out its program clearly--identifying all of the steps to be taken, who will be responsible for taking them, and the level of resources needed to carry out the program. In addition to establishing the ideal process, the program plan identifies additional resources that the program may need, and provides a basis for setting priorities in a conscious, rational manner. The plan also enables the organization to communicate to individuals outside it the choices that must be made and the constraints that exist.

The Division began its program planning effort by carefully and thoroughly articulating what it is trying to achieve. First, the goals of the Division were defined. Consistent with the Massachusetts Hazardous Waste Management Act, the overriding goal of the Division is to protect human health and the environment from the dangers posed by improper handling, storage, and disposal of wastes.

Next, the Division was divided into four sections: Program Planning and Development, Hazardous Waste, Solid Waste, and Hazardous Waste Coordinators. Each section defined a list of objectives--those specific activities that must be undertaken within a set time to accomplish the goals. Each objective was then further broken down into a series of tasks--the specific steps that must be followed in achieving each objective. Following this, estimates were made of the number of staff required to complete each task. These estimates were made on a quarterly

basis for the next year.

### Findings

With the completion of the above process, an established group with known financial resources could simply begin work and track its progress quarterly. For DHW, however, many difficult resource decisions must be made; our program planning exercise has shown a significant discrepancy between the resources needed to perform the tasks and the resources available to the Division. This shortfall is shown below:

<u>Section</u>	<u>Persons needed to complete tasks</u>	<u>Persons available</u>	<u>Shortfall</u>
Program Planning and Development	14	2	12
Hazardous Waste	23	5	18
Solid Waste	21	12	9
Hazardous Waste Coordinators	<u>7</u>	<u>2</u>	<u>5</u>
Total	65	21	44

### Conclusion and Decisions

The Division must take two courses of action to remedy this situation: first, more resources must be obtained, and second, some tasks must be eliminated.

#### More resources

A number of steps have been taken to increase the size of DHW's staff. The Governor has submitted to the legislature a budget for the Division which includes 26 new positions. While this is an important step towards eliminating a major portion of the shortfall, it will not solve the Division's immediate problems. If normal legislative procedures are followed, the Department will receive funds after July 1, 1980. It is not likely that DEQE will receive approval to begin filling positions before January 1, 1981. The job posting, interviewing and other hiring requirements are such that an optimistic date for filling the positions would be a year from now, April 1981. At that time the major work of the program could begin; it could take as long as another year to implement the law. Unfortunately, the work that needs to be done cannot wait a year.

Because of the pressing nature of the hazardous waste problem, DEQE's Commissioner, Dr. Anthony Cortese, has taken extraordinary steps to staff DHW on an interim basis at a cost to other DEQE programs. As a result of the program planning process several of the Department's best program managers have been temporarily re-assigned to:

- direct the development of hazardous waste regulations;
- direct the development and staffing of the new Division;
- direct an internal task force to strengthen the Department's solid waste enforcement program;
- establish a program to focus all of the Department's resources on interim measures to prevent further damage from improperly managed hazardous waste.



For example, one of the Department's attorneys has been assigned to work full time to oversee a major tightening of the existing licensing process, and to support the enforcement work of the Attorney General's Environmental Division and Criminal Bureau, state police, and other law enforcement resources. These decisions have been made after careful scrutiny; the choices have been difficult to make, because these shifts in emphasis are going to be costly to the Department's other programs.

We are also experimenting with a variety of schemes for increasing our resources in the short-run by drawing upon resources outside the Department. For example, a workshop in Harvard's graduate program in City and Regional Planning is doing a project for the Division (see page 7). We currently are using student interns on several projects, and are seeking ways to augment the staff with volunteers and interns with experience in office management, environmental law, and liability insurance. In addition, more federally funded consultant assistance is being sought for these efforts.

#### Fewer tasks

Despite our best efforts at expanding our resources, we are concerned that it will not be possible to complete all of the tasks in the program plan in a timely manner. DEQE staff, along with the Hazardous Waste Advisory Committee, will be taking a hard look at the program plan over the next few months to determine which tasks can be delayed without sacrificing protection of public health and the environment.

#### HAZARDOUS WASTE ADVISORY COMMITTEE STARTS WORK

The Hazardous Waste Advisory Committee appointed by Governor King under the Massachusetts Hazardous Waste Management Act has met twice with Commissioner Cortese and DHW staff. The role of the 14 member committee is to advise the Department on the development of standards, rules, and regulations for hazardous waste management. Although the first two meetings have mainly focused on introducing Committee members to the problem and the issues DHW must address, the Committee has already given DHW constructive criticism. Highlights of these meetings include:

- A decision that the advisory committee will meet once a month; task forces may be formed around specific issues. The meetings will be open to the public;
- A review of the status of the DEQE hazardous waste program and a discussion of the resource constraints DHW faces;
- A review of the DHW program plan. This will be discussed in greater detail during future meetings;
- A review of the DEQE hazardous waste slide show. Several very helpful suggestions for improving the show were made and will be incorporated;
- A discussion of DHW's proposed timeline for development of regulations;
- A discussion of interim licensing provision, siting facilities, and dealing with abandoned hazardous waste sites.

The members of the committee are;

<u>Committee member</u>	<u>Representing</u>
Joan Gardner, Acton Selectman	Mass. Municipal Association*
Joseph Walsh, Beverly Board of Health	Mass. Health Officer's Association*

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\* The Act requires that at least one representative of the group must sit on the advisory committee.

<u>Committee member</u>	<u>Representing</u>
David Ozonoff, Boston University School of Public Health	Mass. Public Health Association*
Leon Bunk, Taunton Conservation Commission	Mass. Association of Conservation Commissions*
Richard Cahaly, Polaroid Corporation	Associated Industries of Mass.*
William McCarthy, Associated Industries of Mass.	Associated Industries of Mass.
George Colella, Mayor of Revere	Mass. Mayor's Association*
John Kryzovic, City Solicitor, Everett	City Solicitors & Town Counsels Assn.*
Alexander Zaleski, Southeastern Regional Planning and Economic Development District	Regional Planning Agency*
Alan McClennen, Metropolitan Area Planning Commission	Regional Planning Agency
Robert Spaulding, Lower Pioneer Valley Regional Planning Commission	Regional Planning Agency
Deborah Howard, Massachusetts Audubon Society	Public*
Dana Duxbury, Mass. League of Women Voters	Public
Paul Burdan, New England Waterworks Assn.	Waterworks Industry

DHW welcomes the establishment of the advisory committee, and looks forward to working closely with it in developing the state hazardous waste program.

#### SPECIAL LEGISLATIVE COMMISSION APPOINTED, CONVENED

On February 13, 1980, Representative Dwinell and Senator Wetmore opened the first session of the Special Legislative Commission on Hazardous Waste. The 18 member Commission was established under the state Hazardous Waste Act to investigate:

- alternative procedures for siting hazardous waste facilities;
- policies for creating a positive economic climate for siting such facilities;
- the development of guidelines and criteria for siting facilities; and
- the prohibition of siting hazardous waste landfills over aquifers, aquifer recharge zones, or groundwater flows supplying water to a municipality.

In addition, they are to consider:

- the transfer of the present power and duties of the Department of Environmental Management's Bureau of Solid Waste Disposal to the DEQE; and
- the prohibition of land disposal of hazardous waste when another reasonable alternative exists.

The Commission must complete its study and make its recommendations to the legislature by June 25, 1980.

Massachusetts must develop a network of properly sited and controlled facilities to store, treat, and dispose of hazardous wastes in an environmentally sound manner.

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\* The Act requires that at least one representative of this group must sit on the advisory committee.



The Commission's most important charge is to design the best possible process for siting these facilities. The success of the regulatory and enforcement programs will depend largely on this effort, for without having proper facilities to handle hazardous wastes, illegal midnight dumping will continue. The Special Commission alone has the authority to define this process. By addressing this task, the Commission will make a big stride in resolving the Commonwealth's hazardous waste problem.

The Commission consists of the following people:

Governor's Appointees

Louis A. Bolduc, Commissioner of Public Health, Pittsfield  
Robert Cummings, Monsanto Plant Manager  
Joan N. Gardner, Acton Selectman  
June Tammi, Resident of Dorchester  
William Wallace, Auburn Board of Health

Members of the Senate

Robert D. Wetmore, Co-chairman  
(D), Barre  
Carol Amick (D), Bedford  
Robert C. Buell (R), Boxford

Members of the House of Representatives

Richard J. Dwinell, Co-chairman  
(D), Millbury  
Theodore J. Alexio, Jr. (D), Taunton  
Nicholas J. Costello (D), Amesbury  
Roger R. Goyette (D), New Bedford  
Richard J. Silva (R), Gloucester

Assigned by Legislation

Commissioner of Environmental Quality Engineering, Dr. Anthony D. Cortese  
Commissioner of Environmental Management, Richard E. Kendall  
Commissioner of Public Health, Dr. Alfred Frechette  
Secretary of Environmental Affairs, Dr. John A. Bewick  
Secretary of Public Safety, George A. Luciano

During the first meeting, Commission members spoke briefly about their view of the Commission's role and how to address the tasks before it. Most Commission members felt that they had a need for more information, and as a result subsequent meetings have been informational in nature. The next three meetings included:

- a public information presentation on hazardous wastes by the Executive Office of Environmental Affairs, including a showing of the DEQE slide show;
- a summary and explanation of the federal Resource Conservation and Recovery Act (RCRA) by the regional counsel of the U.S. Environmental Protection Agency (EPA);
- a discussion of the New England Regional Commission's (NERCOM's) current Hazardous Waste Program, and of the study prepared for NERCOM by Arthur D. Little, Inc.;
- a presentation by the Department of Environmental Management on technologies available for reprocessing, treating, and disposing of hazardous wastes; and
- a discussion of techniques for monitoring facilities, led by a representative of the National Solid Waste Management Association.

Future meetings will address such topics as public opposition to hazardous waste facilities, techniques for resolving public conflict, examination of the facility siting procedure in other states, and whether the state should be able to override a local decision regarding a facility.

## ENFORCEMENT, CLEANUP EFFORTS CONTINUE

- Civil action alleging improper handling of hazardous wastes in the town of Shrewsbury resulted in an Agreement for Judgement against Liquid Waste Specialists, Inc. of Auburn. The court action requires the firm to pay the Commonwealth \$2,000, and grants an injunction barring the defendant from the disposal of any hazardous waste, except in a manner permitted in a license issued by the Division.
- Laboratory analysis has confirmed that the truck stopped last month by state police in Danvers was carrying an illegal hazardous waste shipment. DHW engineers assisted in sampling the contents at that time. The Department has initiated legal actions against the driver.
- Massachusetts, along with 9 other states, is seeking a grant from the Law Enforcement Assistance Administration to form an interstate coordination committee on illegal hazardous waste disposal. The interstate committee would provide information on specific dumpers, illegal disposal methods, enforcement efforts and investigative techniques in each state, licensing and permit denials, and shared strategies for pursuing illegal interstate activities.
- Work is progressing on the cleanup of illegal hazardous waste sites in Dartmouth and Freetown. As of March 25, 530 drums were ready for removal from the Freetown site, and 670 drums were ready for removal from the Dartmouth site. The contents of the drums have been processed so that they can be landfilled. The drums will be shipped out of state for disposal at a secure chemical landfill as soon as a new disposal cell is opened up.
- DHW engineers supervised the cleanup operations performed by a contractor to Penn Central at the former Liquidator site in Dorchester. The hazardous materials were disposed of at a secure chemical landfill out of state. The site has now been cleaned to the ground.
- DEQE has negotiated a contract for \$823,000 to finish cleanup of the Silresim hazardous waste site in Lowell. Approval currently is being sought from the legislature to spend this money from the 5 million dollar fund established last year for the cleanup of hazardous waste sites.
- DEQE and the Attorney General have signed a consent decree with the present owner of the Woburn hazardous waste disposal site. The problems at this site stem back to the turn of the century. (See the January, 1980 Update.)
- Hazardous waste personnel have been overseeing the cleanup of PSC Resources in Palmer. The company abandoned their waste oil facility, only to be required by the Attorney General to clean it up. To date about 725,000 gallons of waste have been removed from the site. The contractor's operations will resume in April or May, weather permitting.

## GROUNDWATER TESTING PROGRAM BEGINS

An ambitious program is underway to test the Commonwealth's groundwater-fed drinking water supplies for the presence of 12 volatile organic chemicals. The goal of the program, which is coordinated by DEQE's Division of Water Supply, is to test 1,000 drinking supplies over the next year. This is an important step in



water supply testing, because much of the state's drinking water is drawn from groundwater; most communities do not routinely test their drinking water supplies for the presence of volatile organic chemicals.

The testing program, which started up on February 4th, will sample 20 water supplies each week. So far 140 water supplies have been sampled. In each case, the water sample is drawn and analyzed at DEQE's Lawrence Experiment Station. This program is part of the 1980 State/EPA agreement; it is funded by EPA.

#### STATE, LOCAL ROLES IN HAZARDOUS WASTE MANAGEMENT EXAMINED

A workshop in Harvard University's graduate program in City and Regional Planning is examining the relationship between DEQE and local groups in responding to hazardous waste incidents. The purpose of the project is to improve the coordination between DEQE and local agencies in addressing hazardous waste problems, and to use our combined resources in the most effective manner.

The 9 graduate students are examining the role of boards of health, conservation commissions, fire departments, police departments, citizens, and other groups in discovering, investigating, and responding to problems in their community; they will also examine the role of DEQE in interacting with these groups. The project will focus on what local resources exist for coping with hazardous waste problems, and will identify problems that local officials encountered in responding to the problem. Based on its case studies, the workshop will recommend to DHW ways in which relationships and coordination can be improved, and how locals can become more actively involved in screening and analyzing problems. The project is headed up by Professor Steven L. Yaffee. Their report is due at the end of May.

DEQE is pleased to have the assistance of these students, many of whom have legal and technical backgrounds. This project is of particular interest to us, because there is a great need for a cooperative effort between state and local agencies in effectively addressing the Commonwealth's hazardous waste problem.

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#### ABOUT THE UPDATE

The Update is a periodic publication about hazardous waste management. Its purpose is to provide the citizens of Massachusetts with information on the implementation of the Massachusetts Hazardous Waste Management Act, and on cleanup and enforcement activities. If you would like to receive the Update and other hazardous waste news, please fill out the form below and send it to: Division of Hazardous Waste, Attention: Update, DEQE, 600 Washington Street, Room 320, Boston, MA 02111.

NAME \_\_\_\_\_

Affiliation (if any) \_\_\_\_\_

Address \_\_\_\_\_

FOR MORE INFORMATION

There are several excellent sources of general information about the hazardous waste problem in Massachusetts and New England. These include DEQE's slide show and Speakers' Bureau, information on facility siting, a regional Speakers' Bureau, and a new regional newsletter on hazardous waste. If you want to sponsor a public information meeting in your community, please feel free to draw upon these resources. For more information about:

- DEQE Speaker's Bureau and hazardous waste slide show, contact Dick Sullivan, Public Information Office, DEQE, 100 Cambridge Street, 20th floor, Boston, MA 02202 (617) 727-0170;
- Facility siting and Regional Speakers' Bureau, contact Ms. Chris Carty, Executive Office of Environmental Affairs, 100 Cambridge Street, 20th floor, Boston, MA 02202 (617) 727-9800;
- The New England Regional Commission's regional newsletter, contact Barbara Turoff, Hazardous Waste Program, NERCOM, 53 State Street, Boston, MA 02109 (617) 223-6330;
- The Special Legislative Commission, contact Debra Sanderson, State House, Room 212 A, Boston, MA 02133 (617) 727-2916;

FURTHER READING

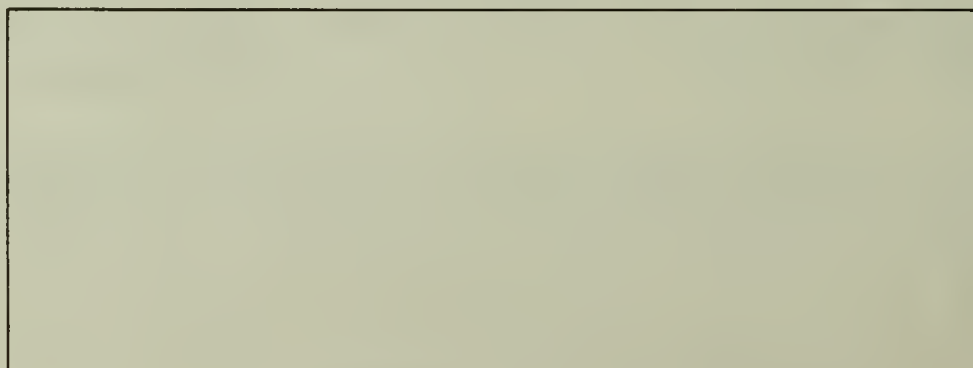
A Plan for Development of Hazardous Waste Management Facilities in the New England Region. Prepared under the Hazardous Waste Management Program of the New England Regional Commission by Arthur D. Little, Inc., 2 Volumes. September 1979. Available from NERCOM, 53 State Street, Boston, MA 02109 Cost: \$7.60.

Chemical Contamination, by the Special Legislative Commission on Water Supply, Commonwealth of Massachusetts. September 1979. Available from the Commission, 14 Beacon Street, Room 701, Boston, MA 02108. Free.

Everybody's Problem: Hazardous Waste (SW-826), U.S. Environmental Protection Agency. 1980. Available from EPA Region I, Division of Air and Hazardous Materials, John F. Kennedy Building, 19th floor, Boston, MA 02203. Free.

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Mass. Department of Environmental  
Quality Engineering  
Division of Hazardous Waste  
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IL-MAY, 1980 • APRIL-May, 1980 • APRIL-MAY, 1980 • APRIL-MAY, 1980 • APRIL-MAY, 1980 • AP

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## ENFORCEMENT, CLEANUP ACTIVITIES CONTINUE

- Early on the morning of Friday, May 11, 1980, state and local police raided a warehouse in Salem and impounded approximately 600 drums of illegally stored chemical wastes. Engineers from the Department of Environmental Quality Engineering (DEQE), who provided technical backup during the raid, tentatively identified the wastes as oily sludges, solvents, and paint wastes; samples were taken and sent to DEQE's Lawrence laboratory for analysis.

The wastes were found in a warehouse owned by Franklin Street Trust, a real estate firm; the warehouse is operated by Gifford Russell. The Attorney General obtained a temporary restraining order forbidding Franklin Street Trust or Mr. Russell to remove or authorize removal of the drums. The order also named the company handling the waste, Chem-Waste Inc., of Londonderry, New Hampshire, and two of its officers; Richard French and John Tinkham. Some of the chemicals are believed to have come from Del Laboratories of Farmingdale, New York. According to James Riesenbergs, vice president of the pharmaceutical and cosmetics firm, Del paid \$22,000 to Chemical Management Inc. of Deerfield, New York, to dispose of the wastes.

For the past two years Chem-Waste Inc. was licensed by DEQE to handle hazardous wastes in Massachusetts. However, on April 28, 1980 DEQE Commissioner, Dr. Anthony D. Cortese, revoked the firm's license on the grounds that they mishandled hazardous wastes in Yarmouth and failed to submit required monthly reports.

DEQE is providing for cleanup of the site through the use of emergency funds, and will take action to recover costs from the parties involved.

- DEQE, the Boston Fire Department, and the State Fire Marshal's office are working together to investigate and cleanup 280-300 drums of hazardous waste found in a Charlestown warehouse. The barrels, some of which probably contain flammable solvents, appear to have been generated by a company in Rhode Island and illegally transported to Massachusetts. Samples have been taken to determine the composition of the wastes. The Fire Department and DEQE are negotiating with the responsible party for proper disposal of the wastes as soon as possible. The wastes must be removed by a licensed hazardous waste transporter, and they must be taken to a licensed treatment/disposal facility. The cleanup plan must be approved by DEQE.

- A joint effort by the Attorney General's Criminal Bureau and DEQE resulted in the discovery of at least 100 barrels of hazardous waste in Kingston. The barrels were unearthed when state police raided the half acre site which is located on the property of a truck dealership. It is suspected that several hundred additional barrels are still buried at the site. DEQE staff provided technical backup to the

raid and arranged for use of the equipment and services of an oil spill cleanup contractor. Preliminary estimates indicate that at least \$250,000 will have to be spent to cleanup the site.

- Personnel from the Division of Hazardous Waste (DHW) supervised the removal of approximately 1300 drums of flammable wastes that were found on the banks of the Hoosic River in Clarksburg. The drums were located on the property of an industrial complex that had declared bankruptcy. The wastes have been sent out of state for disposal in a New York facility.

- A consent decree was signed in February by DEQE, the Attorney General, and the present owner of the Woburn hazardous waste dump site. In order to fully involve the many concerned parties in the community as fully as possible, it was determined that the cleanup of the Woburn site and of uncontrolled sites in general is subject to the Massachusetts Environmental Protection Act (MEPA). As a result, an Environmental Impact Report (EIR) is to be done on the site; it will be overseen by a citizen's advisory committee. Other news on Woburn is that the Environmental Protection Agency approved spending \$150,000 to do extensive air monitoring of the area surrounding the site to determine if there is a potential problem posed by airborne contaminants.

- Cleanup activities have resumed at the PSC site in Palmer where waste oils were abandoned. Between 300,000 and 385,000 gallons of heavy oils and sludges must still be removed. The job is expected to be completed within 8 weeks.

- Approval has been granted by the Legislature to spend the \$823,000 needed to finish cleanup of the Silresim site in Lowell, bringing total cleanup costs for this site to more than 2.3 million dollars. It is estimated that about 607,000 gallons of waste must still be removed and disposed of properly. The final phase of cleanup is expected to start in late May.

#### REGIONAL HAZARDOUS WASTE COORDINATORS APPOINTED

Regional hazardous waste coordinators (RHWCs) have been designated to ensure that DEQE responds to hazardous waste problems in an effective and timely manner. They are:

Edmond G. Benoit, RHCW  
Central Region  
D.E.Q.E.  
75 Grove Street  
Worcester, MA 01605  
(617) 791-3672

Stephen Joyce, RHCW  
Western Region  
D.E.Q.E.  
1414 State Street  
Springfield, MA 01101  
(413) 785-5327

Robert A. Donovan, RHCW  
Southeast Region  
D.E.Q.E.  
Lakeville Hospital  
Main Street  
Lakeville, MA 02346  
(617) 947-1231

Richard F. Slein, RHCW  
Met.Boston/Northeast Region  
D.E.Q.E.  
323 New Boston Street  
Woburn, MA 01801  
(617) 727-5194  
(617) 935-2160

All four men have agreed to serve as hazardous waste coordinators on a temporary basis, while retaining their positions as regional air program managers. During



the next year their involvement in the air program will be reduced to an absolute minimum. Instead, they will work under the supervision of the regional environmental engineer to develop a multi-disciplinary approach to hazardous waste enforcement.

The selection of hazardous waste coordinators reflects DEQE's recognition that improperly managed hazardous wastes threaten all of the environmental areas protected by the agency: air, public water supply, water pollution control, wetlands, and solid/hazardous waste. As a result, a multi-program regional response is needed to make certain that the region's resources are being used in the most coordinated, effective manner possible.

Each regional hazardous waste coordinator will:

- serve as the regional contact for hazardous waste incidents;
- coordinate DEQE and local responses to incidents including investigations of abandoned disposal sites and illegal industrial waste handling practices, surveillance of sanitary landfills to stop hazardous waste dumping, and handling of hazardous materials spills;
- coordinate and develop a working relationship with other groups in his region including state and local police, fire departments, boards of health, conservation commissions, and citizen groups;
- implement DHW's interim enforcement strategy (see page 8 for details).

#### STUDY ASSESSES IMPACT OF COST ON WASTE GENERATION, DISPOSAL

Diane Hoffmann, a graduate student at Harvard's School of Public Health, has recently completed a study examining the effects of disposal cost on 1) the volume of hazardous waste generated and 2) the amount of waste legally disposed of. Ms. Hoffmann studied service stations generating waste oil and the metal finishing industry. The two industries are in very different situations. There are 4,600 service stations in the state, most of which are not owner-operated; in contrast, there are about 180 electroplating shops, most of which are owner-operated. Based on her discussions with waste generators, Ms. Hoffman found that price appears to have little impact on the volume of waste oil generated by service stations; in contrast, it could have a decided impact on reducing the amount of sludge produced by electroplaters.

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Affiliation (if any) \_\_\_\_\_

Address \_\_\_\_\_

Ms. Hoffmann's thesis includes a model for evaluating the impacts of various pricing policies including how appropriate they are and what their side effects might be. She concludes that the desirability of any pricing policy must be evaluated on an industry-by-industry basis, taking into account:

- the number of firms in the state (the fewer people to watch, the more effective traditional enforcement approaches can be);
  - the cohesiveness of the industry and how knowledgeable they are about regulations;
  - the management/owner patterns (does the generator own the firm?);
  - what alternatives are available to reduce the amount of waste generated;
- and
- the toxicity of the substance

Finally, the use of any pricing policy must be evaluated in terms of equity. The equity of the policy would depend on how it is financed; this could range from the generator paying the full cost of proper disposal, to a tax on the generating industry, to support through the general tax base.

#### TRAINING SESSION HELD ON CRIMINAL ENFORCEMENT TECHNIQUES

During April, DEQE and the Attorney General's office sponsored a training session for DEQE inspectors and field personnel to acquaint them with criminal investigative techniques. Paul Shaw, Chief of the Regulatory Crime Unit in the AG's Criminal Bureau, led the session; he explained how to collect evidence for criminal investigations, rights of entry to licensed and non-licensed facilities, how to write accurate reports that will stand up in court, how to establish a chain of evidence, how to write warrants, etc. The session was most profitable; criminal prosecution of hazardous waste violations is a relatively new process, and the exchange of technical and legal information and techniques is much needed. A similar program will be held for local police, fire, and health officials in late June.

#### HAZARDOUS WASTE UPDATE TAKES ON A NEW LOOK

Some readers of the Update may want to retain a file of the most pertinent information in each issue for use as a reference in the future. To help people do this, the Update will have a new fact sheet section marked "Save" that can be torn out of the document and put into a looseleaf notebook. This section will contain background information and information about major policy issues under consideration. The remaining four pages of this issue contain the first in a series of articles that interested readers may want to save (or you may want to keep the whole Update!)

NOTE: On July 21-23, 1980 Tufts University is sponsoring a summer institute on hazardous wastes. The session, "Planning for Disposal of Hazardous Wastes," will be led by Evelyn Murphy. For more information contact: Robert Hollister, Chairman, Department of Urban and Environmental Policy; (617) 628-5000 ext 727.



# HAZARDOUS WASTE OVERVIEW

Proper hazardous waste management in Massachusetts will depend on several important factors:

1. developing comprehensive regulations to carefully track and stringently control hazardous wastes from their point of generation through each stage in their handling, processing and final disposition so as to safeguard public health and the environment;
2. conducting an effective surveillance and enforcement program to ensure that the regulations are being followed;
3. developing a network of environmentally sound, tightly controlled treatment, storage, and disposal facilities to provide an environmentally acceptable alternative to illegal dumping; and
4. assessing and resolving the problems posed by abandoned hazardous waste dumps.

The success of each element largely depends on the effectiveness of the others. For example, even the best regulations will have little impact unless they are backed up by an effective enforcement program. Likewise, strong regulations and a tough enforcement program may result in even more illegal dumping unless badly needed, tightly controlled treatment, storage, and disposal facilities can be located in the state. Finally, the legacy of more than a century of improper waste disposal must be understood and addressed before the Commonwealth's hazardous waste problem can be completely resolved.

## PART I: SURVEILLANCE AND ENFORCEMENT

An effective, comprehensive enforcement program is the key to stopping illegal hazardous waste activities now, and it will be critical in ensuring an effective regulatory program. Developing such a program is particularly crucial because strict enforcement efforts in adjacent states appear to be resulting in even more illegal hazardous waste dumping in Massachusetts and the rest of New England. For these reasons, DEQE is committed to effectively utilizing all of the resources available to the Commonwealth in launching an aggressive hazardous waste enforcement program.

### Types of enforcement actions

There are three major types of enforcement actions that can be taken to prosecute cases of improper waste management. These are: 1) administrative procedures; 2) civil actions, and 3) criminal prosecutions. Each of these avenues has substantially different penalties, procedures, and burdens of proof.

Administrative enforcement actions are proceedings which may be taken by DEQE against individuals or firms already licensed by DEQE. In most cases this will involve DEQE's decision to revoke the license of a firm based on such factors as the licensee's mismanagement of wastes, failure to submit required monthly business reports, or failure to remedy improper storage or disposal conditions discovered during facility inspections. DEQE also may issue administrative orders directing the licensed party to take certain actions to correct improper disposal and storage conditions in cases where revocation is not warranted.

When DEQE decides to revoke a license (or to take other action), the aggrieved party must be notified of the Department's proposed action and of their right to

a hearing (as required by the State Administrative Procedures Act); this notice of intent is called a "show cause notice." If there is an immediate threat to public health or the environment because of the violation, the revocation takes effect immediately. In either case, the licensee is given 21 days to appeal this decision to the Department and to request an adjudicatory hearing. If the decision is not appealed, the Department's action stands. If the decision is appealed, the commissioner appoints a hearing officer to the case. The hearing officer then runs a hearing during which both sides state their case and makes a recommendation to the commissioner to uphold or overturn the earlier decision. The commissioner issues the final ruling in the case. (The decision may still be appealed to the Court.)

Civil actions are prosecuted by the Attorney General, in cooperation with DEQE counsel. The objective of civil action is: 1) to prevent future violations by limiting the behavior of an offending firm or subjecting the firm to government oversight for a period of time; 2) to obtain civil penalties for violations; and 3) to seek reimbursement of cleanup costs. In resolving a civil case, the government and the firm may enter into a consent decree. The consent decree is a judicial order binding the government and the firm into an agreed course of action, and it often includes a fine for the offending party. However, because it is not criminal, a civil action does not involve a finding of guilt. If the terms of a consent decree are violated, the Court may impose contempt sanctions at the request of DEQE; these may include further orders, a fine, or jail. Civil cases are generally handled by the Environmental Protection Division.

Criminal actions in hazardous waste cases are prosecuted by the Criminal Bureau of the Attorney General's office. The objective of a criminal action is to punish wrong-doing by fines and/or imprisonment. The amount of work that goes into building a criminal case is enormous, which is why criminal cases take a long time to investigate. The case is first brought before a grand jury; if the prosecuting attorney establishes that the accused committed the crime, the grand jury returns an indictment. If an indictment is returned, the case goes to trial, usually by jury.

In general, civil actions are much easier to prosecute than criminal actions. Under civil law, if it can be proved by a preponderance of the evidence that a violation occurred, the firm involved is liable; the prosecuting attorney does not have to prove that the defendant knew about the violation or that it was his fault. In contrast, in prosecuting a criminal case the attorney must be able to prove beyond a reasonable doubt that the defendant committed the crime charged. Criminal cases must establish a strict chain of evidence proving the facts of the case.

DEQE and the Attorney General's office together determine the appropriate enforcement route to take.

#### Legislative authority

The Massachusetts Hazardous Waste Management Act of 1979 (Chapter 21C of the General Laws) requires DEQE to develop a comprehensive regulatory program to carefully track and stringently control hazardous wastes from their point of generation, through hauling processing, and final disposition. Until the new regulations are developed, hazardous waste regulations that have been on the books since 1973 will remain in effect. All generators are required to use transporters who have been licensed by the state, and they must send their wastes to licensed facilities, either in state or out of state. Hazardous waste licensees are required to submit monthly reports to DEQE detailing the volumes and types of wastes handled, and where they are taken. Violators of these requirements are subject to stiff penalties invoked under the new law.



The Act expands state enforcement authority and imposes penalties of up to \$25,000 per offense per day, and/or up to five years imprisonment for violation of hazardous waste regulations. This means that illegal disposal is a felony. These new provisions, along with other more specific requirements of the new Act, have resulted in more aggressive enforcement actions by both the Attorney General and DEQE since the Act's enactment in November, 1979.

#### Enforcement activities

Over the past several months DEQE and the Attorney General have been working together closely to combat the "midnight dumping" of hazardous wastes and other illegal disposal activities. Recent steps that have been taken include:

- establishing a hazardous waste strike force to review potential criminal enforcement cases and coordinate state investigation of those cases;
- cross-training law officers, lawyers, and DEQE's technical personnel to increase their effectiveness in investigating criminal waste handling activities and ensuring that wastes are properly handled during the police raids;
- working closely with other state Attorney Generals and environmental officials to investigate suspected interstate waste dumping operations; and
- increasing surveillance of suspected illegal "gypsy" haulers and impounding suspected hazardous waste cargoes.

These efforts have generated enthusiastic cooperation on criminal investigation matters between DEQE, the Attorney General's Office, and the State Police. They have also netted results. Three trucks that were illegally hauling hazardous wastes have been impounded, and indictments are expected soon in a major criminal investigation. In addition, cooperative efforts have resulted in raids of illegal disposal operations in Kingston and Salem. Finally, the Attorney General's Criminal Bureau has held a training session for DEQE staff. The Attorney General's office and DEQE are jointly sponsoring a training seminar on hazardous waste issues for police, fire, and health officials in late June to further encourage their assistance.

In addition, DEQE has taken a number of steps internally to strengthen hazardous waste enforcement efforts. These include the development of an interim hazardous waste strategy, and the temporary re-assignment of key personnel to oversee the implementation of that strategy.

The DEQE interim hazardous waste enforcement strategy is designed to provide the highest visibility, most effective enforcement program possible given the resources which are now available; it has been developed to have the greatest deterrent effect possible. The strategy focuses on three areas. 1) increased surveillance, 2) new controls on licensees, and 3) cooperation and commitment of resources by other law enforcement agencies (discussed above).

A number of steps are being taken to increase surveillance of hazardous waste generators, transporters, and treatment, storage, and disposal facilities. These include:

- Inspecting all hazardous waste licensees, giving special attention to those firms with storage, treatment, or disposal facilities located in Massachusetts. This will include checking licensee's records and comparing them with monthly reports submitted to DHW;

- Inspecting key hazardous waste generators;

• Increasing surveillance of solid waste landfills and working with landfill operators to stop illegal hazardous waste dumping at landfills. Over the years, varying quantities and types of what we now classify as hazardous wastes have been deposited at sanitary landfills. Every effort must be made to stop these practices where they may be continuing. Local officials and sanitary landfill operators must become actively involved in monitoring waste disposal practices in their communities. DEQE will work with local officials and landfill operators to achieve this through education and enforcement.

• Increasing surveillance of waste oil users. The improper handling or reuse of waste oils can result in serious environmental damage, mishandling of waste oil for dust suppression or as a fuel can result in the uncontrolled release and dispersion of contaminants into the environment. DEQE will develop regional programs to assess and monitor waste oil use, and assist in developing public awareness of the need for better controls.

Wherever possible, these activities will be tied in with on-going DEQE activities in other programs, such as the air program's volatile organic compounds (voc) emission inventory.

As part of its interim enforcement strategy, DEQE has developed new controls for hazardous waste licensees. This involves a tightening up on the current licensing process to make it more difficult for non-licensed haulers to represent themselves as licensees. Vehicles hauling hazardous waste will be required to carry cab cards issued by the department. This is expected to assist police work greatly by providing positive identification on the road. A revised license format which commits the licensee to specific standards of performance is now being adopted. Monthly licensee reports will be spot-checked with the licensee's office records, which in turn will be cross-checked with hazardous waste generator records. Administrative revocation proceedings will be instituted against licensees with a record of inadequate monthly reports.

To make certain that the new enforcement strategy is aggressively carried out, DEQE has:

- designated four regional hazardous waste coordinators to assure a multi-program, appropriate response to hazardous waste problems;

• re-assigned one of the department's attorneys to work full-time to oversee the tightening of the licensing process, and to support the enforcement work of the Attorney General's office;

- designated a coordinator for the hazardous waste strike force;

• established an internal task force to strengthen the departments solid waste enforcement program.

